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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/405,299	09/23/1999	RANDALL S. ALBERTE	CEA-005.01	9329

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EXAMINER
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YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/405,299	<b>Applicant(s)</b> ALBERTE ET AL.	
	<b>Examiner</b> Marie R. Yamnitzky	<b>Art Unit</b> 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 34-58 and 65-103 is/are pending in the application.
- 4a) Of the above claim(s) 34-58, 65-70, 74 and 79-103 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 71-73 and 75-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. This Office action is in response to applicant's amendment received January 28, 2004, which amends the specification and claims 71, 72 and 75.

Claims 34-58 and 65-103 are pending.

2. In applicant's amendment, the third line from the end of claim 34 includes an underlined semicolon, and claim 35 includes " $\text{OH}_2$ ". The examiner notes that these are changes previously made to the claims.

3. Applicant's amendment overcomes most of the issues raised in the objection to the disclosure as set forth in the Office action mailed August 26, 2003. The remaining issue is set forth in this Office action. However, in overcoming the objection, new matter has been introduced as noted later in this Office action.

Applicant's amendment overcomes the rejection of claims 75-78 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, as set forth in the August 26<sup>th</sup> action.

Applicant's amendment overcomes the rejection of claims 71, 72 and 75-78 under 35 U.S.C. 102(b) as anticipated by Zimmerman et al. (5,384,176).

Applicant's amendment overcomes the rejection of claims 75-78 under 35 U.S.C. 102(a) or 102(b) as anticipated by applicant's admissions in the specification.

Applicant's amendment overcomes the rejections of claims 75-78 under 35 U.S.C. 102(b) as anticipated by The Merck Index, Tenth Ed. (1983), pp. 876-877, as anticipated by Walworth (4,053,610), and as anticipated by Häfeli (4,087,597).

4. Claims 79-103 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made by original presentation. (Withdrawn method claims will be subject to consideration upon allowance of a product claim provided the conditions for rejoinder as set forth in MPEP 821.04 are met.)

5. The claims remain subject to the election of species. In Paper No. 11, applicant elected the species of a compound of general structure 1 where X represents -OH, Y represents O and Z represents an optionally substituted aryl, and elected the species of coating form wherein the coating is a liquid. Claims 71-73 and 75-78 continue to read on the elected species.

Claims 34-58, 65-70 and 74 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.

6. The amendment filed January 28, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The definitions for "PPCS", "TPPCS", "BPCS" and "BTCS" as added to page 5 of the specification are not clearly supported. The added definitions indicate that these abbreviations are art recognized. Applicant has provided no evidence demonstrating that one of ordinary skill

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in the art at the time of the invention would have understood the abbreviations to have the purported meanings. It is particularly questionable whether PPCS and TPPCS are both art recognized as referring to the same compound since Fig. 3 appears to show that these two compounds provided different results in a spore attachment assay. For example, presuming the number following the abbreviation on the x-axis of Fig. 3 refers to the concentration of the compound, such that "PPCS1" and "TPPCS1" indicate the same concentration, PPCS1 resulted in over 100 spores attached whereas TPPCS1 resulted in less than 100 spores attached. There are also differences for the number of spores attached for the 0.1 and 0.01 concentrations of PPCS versus TPPCS. If these two abbreviations refer to the same compound, why are the results different?

The deletion of the paragraph bridging pages 6 and 7 of the specification introduces new matter because the deletion has the effect of altering the meaning of "alkyl" and "lower alkyl" as used by applicant. (Deletion of this paragraph also removes antecedent basis in the specification for at least a portion of the definition of Z as set forth in amended independent claims 71 and 75.)

Applicant is required to cancel the new matter in the reply to this Office Action.

7. The disclosure stands objected to because of the following informalities:

Line 9 on page 6 refers to  $R_8$  as defined above, but no definition of  $R_8$  precedes this portion of the specification.

Appropriate correction is required.

8. Claims 71-73 and 75-78 stand rejected under 35 U.S.C. 112, first paragraph, for reasons of record in Paper No. 19 (action mailed August 26, 2003) with the following modification.

The rejection is set forth on pages 5-8 of Paper No. 19. The full paragraph on page 7 includes a discussion of seven compounds disclosed in the specification versus the structures 2 and 3 in the claims. Applicant's amendment to page 5 of the specification provides definitions of the abbreviations PPCS, TPPCS, BPCS and BTCS. Applicant's amendment alters the definition of Z in independent claims 71 and 75. In view of these amendments, the full paragraph on page 7 of Paper No. 19 is replaced with the following paragraph:

The present specification provides data pertaining to the use of six compounds: methyl sulfate, octyl sulfate, zosteric acid, PPCS/TPPCS, BPCS and BTCS (based on applicant's amendment filed January 28, 2004, PPCS and TPPCS are the same compound). Methyl sulfate, octyl sulfate and zosteric acid are not within the scope of structure 2 as defined in claims 71-73 and are not within the scope of structure 3 as defined in claim 75. Based on applicant's amendment filed January 28, 2004, PPCS and TPPCS refer to 4-*t*-pentyl phenyl chlorosulfate, BPCS refers to 4-*t*-butyl phenyl chlorosulfate and BTCS refers to *t*-butyl chlorosulfate. Accordingly, PPCS/TPPCS refers to a compound within the scope of structure 2 as defined in claims 71 and 72 and a compound within the scope of structure 3 as defined in claim 75. BPCS refers to a compound within the scope of structure 2 as defined in claims 71-73 and a compound within the scope of structure 3 as defined in claim 75. BTCS defines a compound that is within the scope of structure 3 as defined in claim 75 (but not within the scope of structure 2 as defined in claims 71-73).

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9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 71-73 and 75-78 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 39-63, 66-74 and 89-91 of copending Application No. 09/405,269 for reasons of record in Paper No. 19.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Applicant's arguments filed January 28, 2004 have been fully considered but they are not persuasive with respect to the rejections maintained in this Office action.

With respect to the provisional obviousness-type double patenting rejection, the rejection cannot be held in abeyance. However, at such time as all other grounds of rejection are overcome or withdrawn, the examiner will consider the propriety of withdrawing or maintaining the rejection in accordance with MPEP 822.01.

With respect to the rejection under 35 U.S.C. 112, 1<sup>st</sup> paragraph, applicant argues that the disclosure of zosteric acid, octyl and methyl sulfate, PPCS/TPPCS, BPCS and BTCS is sufficient to enable the entire genus since recitation of a representative number of species within a genus is sufficient to enable the entire genus. It is the examiner's position that the six specific compounds that are disclosed (seven if PPCS and TPPCS are actually not the same compound) are not representative of the entire genus of compounds encompassed by the rejected claims. As noted in the rejection, even the narrowest rejected claim encompasses over 200 compounds. The only feature in common between the disclosed species and all the compounds encompassed by the genus is the sulfur double bonded to each of two oxygens. The genus covers compounds in which the two monovalent radicals ( $-Y-Z$  and  $-X$ ) can be quite chemically different than those of the disclosed species.

Applicant argues that the specification contains considerable guidance and direction, that there is a high level of skill in the art, that the methods needed to practice the invention are well known in the art, that one of ordinary skill in the art has a Ph.D. in the art, and that undue experimentation is not required to practice the invention. Applicant argues that it is improper for the examiner to conclude that the disclosure is not enabling based on the analysis of only one of the undue experimentation factors set forth in MPEP 2164.01(a).

If applicant will review the rejection, applicant will see that the only factor set forth in MPEP 2164.01(a) that was not specifically addressed in making the rejection was the level of one of ordinary skill. Even if the level of ordinary skill in the art is a Ph.D., the examiner



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maintains that the claims are much broader than the enabling scope of the disclosure for the reasons set forth in the rejection.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).


Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY  
May 01, 2004

  
MARIE YAMNITZKY  
PRIMARY EXAMINER

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